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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,006	01/08/2002	A. Burl Donaldson	37000UT0101	5974

5179 7590 03/30/2004

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EXAMINER

MOHANTY, BIBHU R

ART UNIT PAPER NUMBER

3747

DATE MAILED: 03/30/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,006

Applicant(s)

DONALDSON

Examiner

Bibhu Mohanty

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-12,14-16 and 18-28 is/are rejected.
- 7) ☒ Claim(s) 3,7,13 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 8-9, 11, 14, 18-19, are rejected under 35 U.S.C. 102(b) as being anticipated by Hosoda et al US Patent 5,158,0632.

Hosada has disclosed the invention as claimed showing an engine in which the exhaust temperature is measured and the air in the engine (the air-fuel ratio) is controlled by this measurement (see claim 1). When the temperature of the exhaust meets a predetermined value (a "set point") the amount of air introduced into the engine is restricted (see the abstract).

With regard to claims 4, 14, any common air/fuel mixture controller may be considered to be a "proportional controller".

2. Claims 2, 5-6, 10, 12, 15-16, 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Hosoda et al US Patent 5,158,0632.

Hosada has disclosed the invention substantially as claimed (see ppgh. 1 above). However, Hosada does not disclose heating the intake air when the temperature is below the "set point".

The Examiner takes Official Notice that it is well known that heated air

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may provide for better combustion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hosoda to heat the intake air for better combustion if the measured combustion product air was below the target value.

With regard to claims 5-6, 15-16, the use or location of a common butterfly valve is considered an obvious expedient for increasing airflow.

With regard to claims 21-28, the use of the system in a common alcohol or diesel engine is considered an obvious expedient for the benefits provided by those systems.

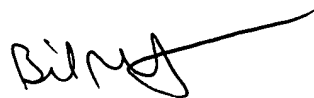
3. Claims 3, 7, 13, 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bibhu Mohanty whose telephone number is 703 308-3706. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 703 308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308-7766 for regular communications and 703 308-7766 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3310.



Bibhu Mohanty
Primary Examiner
Art Unit 3747

brm
March 17, 2004